

**STATEMENT OF WORK
DESIGN/BUILD SERVICES
for
REHABILITATION OF OFFICE AND VISITOR CENTER
at
QUIVIRA N W R
(09-036)**

I. PROJECT SCOPE

Provide Design/Build services to rehabilitate the office and visitor center at Quivira National Wildlife Refuge, Stafford, Kansas. Provide architectural and engineering design services by professionals licensed to practice in Kansas, including architectural, civil, structural, mechanical and electrical engineering disciplines. After the design is complete and approved, construct the facility in accordance with the approved construction documents.

The Design/Build Contractor's project team shall include the construction contractor's project superintendent, representatives from each major construction trade, and the design contractor's civil, architectural, structural, mechanical, and electrical designers. The intended function of the team is to collaborate during design on selecting the specific materials, products, and equipment which will be used in the construction, and developing the details on how the building materials and components will be assembled.

Partial Title I Services

Design an addition to the existing headquarters office building based upon the Statement of Initial Program Requirements, the attached schematic floor plan and other drawings, and supplemental information developed during design conferences with the Fish and Wildlife Service (FWS). Develop the design to fully illustrate the principal civil, architectural, structural, mechanical and electrical aspects of the project.

Design interior remodeling of the visitor contact and display areas, offices, and work areas in the existing building.

Design revisions to the layout of site utilities required to accommodate the new structure.

Review the design with FWS and revise the design as necessary to address the review comments.

Evaluate the proposed plan and program requirements for:

- Feasibility within the project budget.

- Integration with the existing structure and mechanical systems.

- Compliance with specified codes.

Adjust and refine the design as required.

Title II Services

Complete the design, produce drawings, specifications and other documentation necessary for construction, and submit for FWS review, comment, and approval prior to starting construction.

Construction

Execute the construction work per the approved design, approved materials and equipment, and per the approved construction schedule.

II. BACKGROUND

The Quivira National Wildlife Refuge is located approximately 32 miles west and 1 mile north of Hutchinson, Kansas on West 4th Ave. The existing headquarters building was built in two stages; the first in 1964, of masonry construction, and the second in 1994, of frame construction with brick veneer.

The existing Refuge headquarters will remain in operation through construction, which will require staging of construction in various parts of the building.

III. DESCRIPTION OF SERVICES TO BE PERFORMED BY DESIGN/BUILD FIRM

PARTIAL TITLE I SERVICES

Title I Services include all design and design development work up to the point of preparation of construction drawings and specifications.

Conduct an initial site visit at the Refuge with representatives of FWS to gather data on the existing facility and site, to review the Statement of Initial Program Requirements and the attached drawings, and to develop any additional information required to proceed with Title I services. Document information developed, and decisions made in the initial conference, and submit minutes to FWS.

Conduct geotechnical investigations to determine soil type, bearing pressures, maximum density, and optimum moisture content. Provide a copy of the geotechnical report to FWS. Conduct a topographic survey of the site to the extent required for design of the building.

Develop a quality control plan for the design process, including reviews, standards, and procedures for coordination between the design team and construction trades. Submit and review the plan with FWS prior to start of design work.

Based on the information provided and gathered at the site, develop a final design which integrates all the program requirements, and the architectural, structural, mechanical, and electrical systems, and produce drawings and text to illustrate the design. This information shall include, at a minimum:

Floor plan

Exterior elevations

Building or wall sections along the major axes.

HVAC plan, showing all major equipment and locations, and duct runs laid out to avoid interference with the structure and electrical components.

Power and lighting plans.

Proposed materials and products, presented in outline specification format or list form.

Develop the design in conformance with:

Architectural Barriers Act Accessibility Guidelines 2004

Life Safety Code 2006

International Building Code 2006

International Mechanical Code 2006

International Plumbing Code 2006

ASHRAE Standards

National Electric Code 2008

The U. S. Green Building Council's LEED 2.1 Green Building Rating System, so that the building would qualify for a Certified Rating. Actual certification is not required; however, the Contractor shall provide documentation of credits for qualification. Review the LEED analysis with Service personnel.

Energy Policy Act of 2005. Note that EPACT requires new federal buildings to be designed to a performance efficiency 30% better than ASHRAE 90.1 using life cycle cost effective technologies.

Document compliance via COMcheck-EZ software, available at www.energycodes.org, and submit to the Service.

Applicable state, county, and local codes and regulations

Provide a copy of the code analysis to FWS.

Review the design with FWS at the completion of Title I services. Compile a written list of all review comments and their disposition, either accepted, changed, or not incorporated (with explanation); and submit minutes of the review meetings. Incorporate refinements into the design from the reviews.

Proceed with Title II services after approval of Title I design by the Service.

TITLE II SERVICES

Produce drawings containing all information necessary for construction from the Final Title I design, including civil, architectural, structural, mechanical, and electrical disciplines.

Produce agreement among the project team on the overall design, the construction details, specific materials and equipment which will be used for construction, and methods and standards of construction. Review the proposed design, details, materials and equipment with FWS before final incorporation into Title II documents to avoid backtracking and revisions during final review. Conduct internal reviews with design

and construction teams to verify completeness, accuracy, coordination, and constructability of Title II documents.

Produce construction-level submittals for all materials, equipment, and components which will be incorporated into the construction, with samples available for selection of finishes or colors for interior and exterior finishes and equipment. Produce outline specifications describing the workmanship and quality standards to be used in construction.

Contact representatives of the Service during Title II services, if necessary, to obtain supplemental information and verify work-in-progress. Provide a technically knowledgeable person to take notes during all review meetings with FWS, and provide minutes to FWS.

Review the work products of Title II Services with representatives of the Service at the 95% complete stage. Compile a written list of all review comments and their disposition, either accepted and incorporated, changed, or not incorporated (with explanation). Complete the construction documents and submit three full-size sets of sealed, 100% construction documents, and minutes of the 95% review.

Proceed with construction after approval of 100% design documents by the Service. Reproduce all drawings and specifications required for construction.

CONSTRUCTION

Construct the new building in accordance with the approved construction documents.

Comply with the general requirements described in Division 1 specification sections, attached.

Provide a cost breakdown for each bid item to indicate the dollar value of each category of work or construction trade, and provide a schedule for accomplishing the work. Provide a quality control plan for the construction. Develop and implement a construction site safety plan.

Pay for a qualified independent testing laboratory to conduct soils testing and concrete testing during construction.

Recycle waste construction materials, if a recycler is available in the vicinity of Hutchinson or Great Bend, Kansas

Allow the Refuge one week between new construction and remodel phases to relocate their operations into the new facility.

At the project completion, the Contractor shall conduct building commissioning by personnel qualified in electrical, HVAC, and plumbing systems, independent of the subcontractors and installers, to confirm that building systems have been properly

constructed and function as intended by the design, and shall demonstrate their operation to FWS personnel.

Maintain full-size set of record (as-built) drawings on site during construction. At construction completion, update CAD drawings with all as-built information and provide two full-size sets to the Government. Provide original warranty forms with required signatures and information filled in.

IV. ATTACHMENTS TO THE STATEMENT OF WORK

Statement of Initial Program Requirements

A written description of the minimum quality, performance, and material requirements of the project. The program requirements include:

- Climate Zone 4 Recommendations
- Georexchange System Start-up & Checkout form

The requirements listed are not comprehensive in nature; they describe a starting point for development of the design and construction documents. Additional, undescribed or unlisted materials will be required for a complete and functional facility. In the absence of specific requirements, provide construction equal to or exceeding standard commercial practice.

Drawings

The following drawings are attached to illustrate the scope of work. Autocad files of these drawings shall be provided to the selected Contractor after award of contract. The format of the drawings produced by the Contractor shall be the same format used in the attached drawings.

- Cover Sheet
- Site Plan
- Existing Plan
- Existing Basement Plan
- Schematic Floor Plan
- Exterior Elevations

No guarantee is made as to the completeness or accuracy of the information contained in the drawings regarding existing conditions. The Contractor shall be responsible for conducting his own survey and investigation of existing conditions at the site and in the building.

The Schematic Floor Plan provided is not comprehensive in nature; it is intended to show the general size, shape, and layout of the work. Locations and quantities of building elements such as windows, doors, partitions, casework, structural members, mechanical and electrical fixtures and equipment can reasonably be expected to change from what is shown as the design is developed into final construction drawings.

Division 1 Specifications

These specifications shall be incorporated into the construction documents:

01 11 00	General Requirements
01 33 00	Submittals
01 45 29	Testing Laboratory Services
01 50 00	Temporary Facilities and Controls
01 77 00	Project Closeout Procedures

V. CONFERENCES AND REVIEWS

Initial Conference

The Initial Conference shall be held in the headquarters of Quivira National Wildlife Refuge. This may occur either as a Pre-Bid Conference or a post-award Initial Design Conference, as deemed appropriate by the Contracting Officer.

Title I and Title II Reviews

The Contractor shall review design work with FWS as specified in preceding paragraphs. The reviews shall be held in the headquarters of Quivira NWR, or by telephone conference, depending upon the location of the design contractor's and construction contractor's offices. Provide two sets of review documents to Quivira NWR and two sets of review documents to the Regional Office of FWS a minimum of four working days before the review meeting. The Contractor's review team shall include all disciplines required to explain the work being presented. The Contractor's review team shall include a technically knowledgeable person to record all review comments and decisions made during the conference.

Construction Inspection

The Government shall have one or more Contracting Officer's Representatives assigned to do observation and/or inspection of the construction.

VI. DELIVERABLES

Title I Phase

- Initial conference minutes (4 sets)
- Review drawings (4 sets)
- Code analysis
- Documentation of compliance with 10 CFR 435
- Documentation of LEED credits
- Minutes of Title I review meeting

Title II Phase

- 95% Review drawings (4 sets)
- Minutes of 95% review (4 sets)

Submittals for all materials, equipment, and components (two sets for Government, plus sets for contractor and subs)
 100% Full-size drawings - three sets, signed and sealed.
 100% Half-size drawings – one set on white bond.
 Electronic file copy of drawings in AutoCad 2005 or 2008 format, on CD, and all associated x-ref files, fonts, etc.

Construction Phase
 Schedule of Values
 Construction schedule
 Record drawings (hard copies and updated CAD file) on CD
 Warranties
 Operation and Maintenance Manuals

VII. SCHEDULE

<u>Milestone</u>	<u>Maximum Interval after Contract Award</u>
Initial conference	7 days
Title I Review	56 days
Title II 95% Review	49 days
Final Submittal	7 days
Construction start	14 days
Construction complete	246 days

VIII. DESIGNATED OFFICIALS

- A. U.S. Fish and Wildlife Service, Region 6
 P.O. Box 25486
 Denver Federal Center
 Denver, CO 80225
1. Contracting Officer
 To Be Determined
 2. Project Manager and COTR
 George Newland
 Phone: (303) 236-4479
 Facsimile: (303) 236-4759
 E-Mail: george_newland@fws.gov
- B. Quivira National Wildlife Refuge
 1434 N.E. 80th
 Stafford, Kansas 67578
1. Refuge Manager

Dan Severson
Phone: (620) 486-2393
Facsimile: (620) 486-2315
E-Mail: dan_severson@fws.gov

2. On-site Construction Inspector
To be determined
Phone: (620) 486-2393
Facsimile: (620) 486-2315
E-Mail: